

# Pest Update (June 6, 2012)

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John Ball, Forest Health Specialist SD Department of Agriculture,  
Extension Forester SD Cooperative Extension

Email: [john.ball@sdstate.edu](mailto:john.ball@sdstate.edu)

Phone: 605-688-4737

Samples sent to: John Ball  
Plant Science Department  
rm 230, Agriculture Hall, Box 2207A  
South Dakota State University  
Brookings, SD 57007-0996

Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

## Available on the net at:

<http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx>

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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## Plant development



We are still ahead of plant development this year due to the mild winter and early spring. The basswoods are beginning to bloom as can be seen in this picture sent in by Rick, a South Dakota Department of Agriculture forester in Sioux Falls. This is about two to three weeks earlier than normal.

## Current concerns



**Pictures continue to come in of maples and birches with severe dieback.** It seems every day at least one or two e-mails or calls come in about a “half dead” maple or birch. The general pattern to the symptoms is that the tree looked fine last year but this spring the upper 1/2 or 2/3's of the canopy is dead. In many instances the top is not entirely dead. The buds were killed but now the shoots are sprouting from adventitious buds and these canopies are beginning to fill in with leaves. The stressor for this unusual symptom pattern is most likely desiccation injury due to

the dry autumn and warm winter. Birches and maples are very sensitive to this type of injury along with elms and catalpas, two other trees that are showing thinning canopies. There is nothing that can be done other than wait a few more weeks to see if the tree does leaf out. If no leaves appear in the next several weeks you can safely assume the top is dead and either prune out the dead top or just remove the tree.



## Tasks to complete



**Codling moth** treatment time is now as the adults will soon be out laying eggs. Once the larvae hatch they will burrow into the developing apple, usually near the base of the fruit, resulting in a trail through the apple filled with brown, powdery frass. This frass often extrudes from the entry hole as seen in the picture to the left. The treatment is usually malathion

applications, though there is much evidence that carbaryl (Sevin) provides better control, beginning about 10 days after petal fall and then three more applications spaced about 10 days apart. The other option is **bagging the individual apples** using the Japanese fruit bags when the apples reach about ½-inch diameter. This is no guarantee of control as the fruit may become infested before that size but they do provide reasonable control of this pest and many others as well as improve the shine to the fruit. The bags may be obtained from Gardens Alive! at [www.gardensalive.com](http://www.gardensalive.com).



**We should be shearing pines now.** Pines set only terminal buds, not along the new shoots as do spruce and fir, so the only time to shear them – removal of a portion of the current season's growth - is during the candle phase where the expanding new shoot is still tender. Removal of a portion of the shoot during this time period will still permit the new shoot to set buds. If the pine is sheared after the new growth has completed expansion and

has hardened, no buds will be set and the shoot will dieback after the older needles are shed, usually in a couple of years. Wait until the new needles along the candle are about ½ the size of the older needles and shear then. *Also an interesting note: I have received several calls from tree owners concerned about the "white covering" on the tips of their pines and spruce – these are the expanding candles, a normal occurrence.*

## E-samples



**Black knot is showing up on cherries and plums across the state.** I received this excellent picture of the fungal disease from Butte County. The disease name "Black knot" is very descriptive of the disease (as is the other name, 'dead man's finger'). The cankers become very noticeable at this time of year and tree owners wonder if they should prune them off. The short answer is "yes" but this is only a temporary fix for the disease as only these two-year old cankers are easily seen in the tree. The first year cankers may appear only as a slight swelling on the twigs, an abnormality that can easily be missed. This is why many tree owners will prune out every canker only to see them form again the following year. There is no long term control for the



disease other than remove the tree. The City of Winnipeg did just that this spring, removing hundreds of infected Schubert chokecherries from along the boulevards.



**Downy mildew is appearing on cranberrybush viburnums.** This disease does not generally appear until late June but this year many of our pests are making an early appearance. Downy mildew symptoms appear as the weather turns warm with the upper surface of the leaves showing brown to black margins and the lower surface of the leaves with whitish to gray downy patches. Once the disease has damaged the leaves

there is little value in any control efforts. The best recommendation is to remove the infected leaves this fall as the disease overwinters on the fallen infected leaves.



**I received a picture of European elm scale from Butte County.** The tree owner was concerned about the dieback in the canopy of the tree and saw these “bugs.” The insects are the adult European elm scales. The adults are sessile, they do not move, and remain in one spot sucking the sap from the shoots on which they are attached. The adults also produce honeydew as a by-product of their feeding and this sticky material is commonly found on the foliage and anything parked beneath the trees. I often receive calls from

people saying their tree is “weeping” on their car. The tree is not crying; it’s the liquid excreted from the insect that is causing the stickiness. While the adults are immobile, the young, referred to as crawlers, hatch in early June and move about the leaves before settling down on the shoots. The best control is a soil drench of an insecticide containing imidacloprid as the active ingredient applied in the autumn. The material will be taken up and move throughout the tree by spring, killing the scales as they feed.

## **Samples received**

### **Custer County**

### **What might be wrong with this fir?**

The picture that was emailed earlier appeared to show some damage at the tips of the shoots, almost like a tip moth. However the sample did not show this injury and did not have any signs or symptoms associated with common insect or disease problems on this tree – and there are few problems that affect this tree in South Dakota. However, our winters are a great killer and the buds

were desiccated on the sample. This warm winter was hard on many marginally adapted trees in the state and I wonder if this was the problem here. If the tree does have tip damage, either submit another sample or I'll stop and look at the tree in another week.

Douglas County

**What is wrong with these spruce?**

**One is 4-feet tall and the other is about 8-feet tall. I can see some webbing on the needles.**

One of the problems is the spruce needleminer. I could find clumps of needles that were webbed together and a number of hollowed out needles. These are two common symptoms associated with spruce needle miner as the larvae when they first hatch are small enough to live inside the needles and as the insect matures it leaves the needle and instead clumps them together to form a nest. The adult moths should be flying in the next week or so. The flight time is usually around the 4<sup>th</sup> of July but I expect them to be flying early as they have already pupated. The best control is in another week spray the trees with an insecticide containing carbaryl as the active ingredient and do another application in two more weeks.

I suspect this is not the only problem on these trees as the needle loss was excessive. You mentioned the trees have been watered and the soils are well-drained – these are two of the common killers of spruce, soils too wet or dry – so I wonder if the planting was too deep. Regardless there is probably some root related problem with these trees and the miners are only one of the stressors.

Faulk County

**What is wrong with this decorative apple?**

First it is not an apple but an Amur maple and the problem appears to be the disease, *Pseudomonas syringae*, a bacterial disease common on lilacs and Amur maples in shelterbelts in our state. We had a bad outbreak of the disease in 2010 with widespread damage on lilacs throughout the eastern half of the state. The most common symptom is blackening leaves and shoot tips, sometimes resembling what would be expected on an apple infected with fireblight. It also looks like frost damage and this is due to the ice nucleation ability of the bacteria, essentially allowing the formation of ice crystals in plant tissue and increasing frost injury. The control of the disease on maples is the same as for lilacs; removal of infected shoots as they die. The plant may still recover as the disease is usually not fatal.

Perkin County

**This is a browning arborvitae located in Lemmon. Several of the neighboring arborvitaes are also turning brown.**

This is winter injury. First, arborvitaes are marginally hardy to the Lemmon area – the winters are too dry and windy for the plants to do well. This winter was particularly tough on these plants and we had reports of browning arborvitae from throughout the state. The only recommendation is to prune out the branches with brown and dry foliage and see if the plant recovers (or look

nice enough to keep). Watering arborvitae in August and September is critical to their overwintering survival and this would be done this common fall.

Perkin County

**This is a branch from a Colorado spruce in Lemmon. The homeowner is controlling the spider mites on the trees.**

Apparently not well enough as the branch was covered with the mites. Now that the summer is turning hot, the mites will become dormant and controls are ineffective. While the mites will be dormant for the summer, the damage from their spring feeding will continue to become more noticeable so do not be surprised if these trees look worse by August. The next window for control is this fall, about the time silver maple leaves begin to color.